

1

5 The present invention pertains to novel strains of the *Bacillus subtilis* group capable of fermenting beans, which are essentially devoid of any iso-valeric acid production. The present invention especially relates to novel strains of *Bacillus natto*, in which one or more genes involved in the biosynthetic pathway for the production of iso-valeric acids are essentially non-functional.

$$\begin{array}{l} \left\langle \frac{\partial^2 f}{\partial x^2} \right\rangle_{x=0} \\ \left\langle \frac{\partial^2 f}{\partial y^2} \right\rangle_{y=0} \\ \left\langle \frac{\partial^2 f}{\partial z^2} \right\rangle_{z=0} \\ \left\langle \frac{\partial^2 f}{\partial x \partial y} \right\rangle_{x=y=0} \\ \left\langle \frac{\partial^2 f}{\partial x \partial z} \right\rangle_{x=z=0} \\ \left\langle \frac{\partial^2 f}{\partial y \partial z} \right\rangle_{y=z=0} \\ \left\langle \frac{\partial^2 f}{\partial x \partial y \partial z} \right\rangle_{x=y=z=0} \\ \left\langle \frac{\partial^2 f}{\partial x^2} \right\rangle_{x=a} \\ \left\langle \frac{\partial^2 f}{\partial y^2} \right\rangle_{y=b} \\ \left\langle \frac{\partial^2 f}{\partial z^2} \right\rangle_{z=c} \\ \left\langle \frac{\partial^2 f}{\partial x \partial y} \right\rangle_{x=a,y=b} \\ \left\langle \frac{\partial^2 f}{\partial x \partial z} \right\rangle_{x=a,z=c} \\ \left\langle \frac{\partial^2 f}{\partial y \partial z} \right\rangle_{y=b,z=c} \\ \left\langle \frac{\partial^2 f}{\partial x \partial y \partial z} \right\rangle_{x=a,y=b,z=c} \end{array}$$